

## Geometry

Name \_\_\_\_\_

## ALGEBRA REVIEW PACKET

Per. \_\_\_\_\_ Date \_\_\_\_\_

*These are some of the necessary skills that you will need from Algebra last year. This is your chance to review and make sure you have mastered them before we begin with Geometry! ☺*

### Rounding Numbers

**Remember:** Look at the number to the right of the place you are rounding to. If it is 5 or above - round up. If it is below 5 it stays the same.

*whole number* = no decimal place  
*tenth* = one decimal place

*thousandths* = three decimal places  
*hundredth* = two decimal places

**Practice:** Round the following numbers to the specified place values.

*Round to the nearest whole number:*

- |    |           |    |           |    |          |    |          |    |          |
|----|-----------|----|-----------|----|----------|----|----------|----|----------|
| 1. | 21.684    | 2. | 12.436    | 3. | 8.962    | 4. | 0.752    | 5. | 1.123    |
|    | <u>22</u> |    | <u>12</u> |    | <u>9</u> |    | <u>1</u> |    | <u>1</u> |

*Round to the nearest tenth:*

- |    |             |    |            |    |            |    |            |     |              |
|----|-------------|----|------------|----|------------|----|------------|-----|--------------|
| 6. | 14.852      | 7. | 5.52       | 8. | 6.476      | 9. | 0.423      | 10. | 185.038      |
|    | <u>14.9</u> |    | <u>5.5</u> |    | <u>6.5</u> |    | <u>0.4</u> |     | <u>185.0</u> |

*Round to the nearest hundredth:*

- |     |             |     |              |     |             |     |              |     |             |
|-----|-------------|-----|--------------|-----|-------------|-----|--------------|-----|-------------|
| 11. | 0.2587      | 12. | 12.9852      | 13. | 1.2629      | 14. | 35.42385     | 15. | 1.3695      |
|     | <u>0.26</u> |     | <u>12.99</u> |     | <u>1.26</u> |     | <u>35.42</u> |     | <u>1.37</u> |

### Order of Operations

**Remember:**

Parenthesis/groups/fraction bars

Exponents

Multiplication\*

Division\*

Addition\*

Subtraction\*

\* Multiplication/Division and Addition/Subtraction are always done in order from left to right!

P  
E  
MD  
AS

**Practice:**

16.  $4 + 7 - 12 \div 3$  7

17.  $12 \bullet 3 \div 6 - 9$  -3

18.  $(11 + 4) \div 3 - 2$  3

19.  $3(6 + 7)$  39

20.  $2 + 7 \cdot 5$  37

21.  $48 \div (4 + 4)$  6

22.  $8(2 + 7) - 15$  57

23.  $14 \div 7 - 12 \div 3$  -2

24.  $(6 + 25 - 7) \div 6$  4

25.  $(6 - 4) \bullet 49 \div 7$  14

26.  $\frac{43 - 1}{4 + 2} + 10$  17

27.  $\frac{45}{8(5 - 4) - 3}$  9

28.  $8\frac{15}{5} - (5 + 9)$  10

29.  $(10 + 2 - 2) \bullet 6 - 1$  59

30.  $(2 + 6 \times 2 + 2 - 4) \bullet 2$  24

**Solving Equations**

Ex: 1.  $x + 5 = -1$   
 $-5 \quad -5$   
 $x = -6$

2.  $y - (-2) = -7$   
 $y + 2 = -7$   
 $-2 \quad -2$   
 $y = -9$

3.  $\frac{x}{5} = -2$   
 $5 \bullet \frac{x}{5} = -2 \bullet 5$   
 $x = -10$

4.  $3y = -18$   
 $\frac{3y}{3} = \frac{-18}{3}$   
 $y = -6$

5.  $\frac{x}{4} = -3$   
 $4 \bullet \frac{x}{4} = -3 \bullet 4$   
 $x = -12$

6.  $4(-2x - 11) = 92$   
 $-8x - 44 = 92$   
 $+44 \quad +44$   
 $-8x = 136$   
 $\frac{-8x}{-8} = \frac{136}{-8}$   
 $x = -17$